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LIST OF REFERENCES BY APPLICANT

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Application Number	10/628,128
Filing Date	7/25/2003
First Named Inventor	Lian-Ao Wu
Art Unit	2133
Examiner Name	To be assigned
Attorney Docket Number	11090-013-999

Sheet 1 of 3

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
DL	AA	US- 5,307,410	4-26-1994	Bennett	
	AB	US- 5,917,322	6-29-1999	Gershenfeld et al.	
	AC	US- 6,563,311 B2	5-13-2003	Zagoskin	
	AD	US- 6,459,097 B1	10-01-2002	Zagoskin	
	AE	US- 2003/0164490 A1	9-04-2003	Blais	
	AF	US- 2004/0000666 A1	1-01-2004	Lidar et al.	
	AG	US- 2004/0109631 A1	6-10-2004	Franson et al.	
	AH	US- 60/349,663		Zagoskin et al.	

FOREIGN PATENT DOCUMENTS

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		Country Code ³ - Number ³ - Kind Code ³ (if known)				
	AI	WO- 99/14614 A1	03-25-1999	Kane		

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

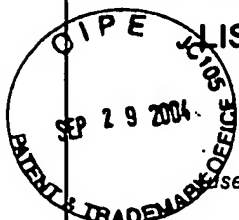
	AJ	Averin, D.V., 2002, "Quantum Nondemolition Measurements of a Qubit," Phys. Rev. Lett. 88, 207901.
	AK	Averin, D.V., R. Fazio, 2002, "Active suppression of dephasing in Josephson-junction qubits," ArXiv.org preprint server: cond-mat/0212127.
	AL	Barenco, A., C.H. Bennett, R. Cleve, D.P. DiVincenzo, N. Margolus, P. Shor, T. Sleator, J.A. Smolin, and H. Weinfurter, 1995, "Elementary gates for quantum computation," Phys. Rev. A 52, 3457-3467.
	AM	Bennett, C.H., G. Brassard, C. Crépeau, R. Jozsa, A. Peres, and W.K. Wootters, 1993, "Teleporting an Unknown Quantum State via Dual Classical and Einstein-Podolsky-Rosen Channels," Phys. Rev. Lett. 70, pp. 1895-1899.
	AN	Blais, A., and A.M. Zagorskin, 2000, "Operation of universal gates in a solid-state quantum computer based on clean Josephson junctions between d-wave superconductors," Phys. Rev. A 61, 042308.

Examiner
Signature

Douglas A. Smith

Date
Considered

19 Jan 05



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AO	Brown, K.R., D. A. Lidar, and K. B. Whaley, 2001, "Quantum computing with quantum dots on quantum linear supports," Phys. Rev. A 65 , 012307.
AP	Burkard, G., H.-A. Engel, and D. Loss, 2000, "Spintronics and Quantum Dots for Quantum Computing and Quantum Communication," published on ArXiv.org preprint server: cond-mat/0004182 (2000).
AQ	Childs, A.M., I.L. Chuang, and D.W. Leung, 2000, "Realization of quantum process tomography in NMR," ArXiv.org preprint server: quant-ph/0012032.
AR	Choi, M.-S., 2001, "Solid-state implementation of quantum teleportation and quantum dense coding," Phys. Rev. A 64 , 054301.
AS	Choi, M.-S., M.Y. Choi, T. Choi, and S.-I. Lee, 1998, "Cotunneling Transport and Quantum Phase Transitions in Coupled Josephson-Junction Chains with Charge Frustration," Phys. Rev. Lett. 81 , 4240-4243.
AT	Cirac, J.I., and P. Zoller, 1995, "Quantum Computations with Cold Trapped Ions," Phys. Rev. Lett. 74 , pp. 4091-4094.
AU	Cottet, A., D. Vion, A. Aassime, P. Joyez, D. Esteve, and M.H. Devoret, 2002, "Implementation of a combined charge-phase quantum bit in a superconducting circuit," Physica C 367 , pp. 197-203.
AV	DiVincenzo, D.P., 2000, "The Physical Implementation of Quantum Computation", published on ArXiv.org preprint server: quant-ph/0002077.
AW	Dodd, J.L., M. A. Nielsen, M.J. Bremner, and R.T. Thew, 2002, "Universal quantum computation and simulation using any entangling Hamiltonian and local unitaries," Phys. Rev. A 65 , 040301.
AX	Falci, G., R. Fazio, G.M. Palma, J. Siewert, and V. Vedral, 2000, "Detection of geometric phases in superconducting nanocircuits," Nature 407 , 355-358.
AY	Gottesman, D., and I.L. Chuang, 1999, "Demonstrating the Viability of Universal Quantum Computation using Teleportation and Single-Qubit Operations," Nature 402 , pp. 390-393.
AZ	Imamoglu, A., D.D. Awschalom, G. Burkard, D.P. DiVincenzo, D. Loss, M. Sherwin, and A. Small, 1999, "Quantum Information Processing Using Quantum Dot Spins and Cavity QED," Phys. Rev. Lett. 83 , pp. 4204-4207.
BA	Kane, B.E., 1998, "A silicon-based nuclear spin quantum computer," Nature 393 , 133-137.
BB	Kane, B.E., 2000, "Silicon-based Quantum Computation," published on ArXiv.org preprint server: quant-ph/0003031.
BC	Kikkawa, J.M., I.P. Smorchkova, N. Samarth, and D.D. Awschalom, 1997, "Room-Temperature Spin Memory in Two-Dimensional Electron Gases," Science 277 , pp. 1284-1287.
BD	Knill, E., R. Laflamme, and G.J. Milburn, 2001, "A scheme for efficient quantum computation with linear optics", Nature 409 , pp. 46-52.
BE	Koashi, M., T. Yamamoto, and N. Imoto, 2001, "Probabilistic manipulation of entangled photons," Phys. Rev. A, 63 , 030301.
BF	Korotkov, A.N., 1999, "Continuous quantum measurement of a double dot," Phys. Rev. B 60 , pp. 5737-5742.
BG	Korotkov, A.N., 2001, "Selective quantum evolution of a qubit state due to continuous measurement," Phys. Rev. B 63 , 115403.

Examiner Signature	<i>Roughly with</i>	Date Considered	<i>19 Jan 05</i>
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